WHAT IS CLAIMED IS:

1. A method of calibrating a color reproduction apparatus which has a process for converting received digital color signals to uniquely-associated drive code values and to then produce an image rendering with color densities corresponding to the drive code values; the method comprising the steps of:

using the color reproduction apparatus to produce a calibration target having a plurality of color patches by using input code values which correspond to a sampling of color densities, wherein one subset of said color patches is intended to have neutral color density values and another subset of said color patches is intended to have non-neutral color density values deviating in their mix of red, green, and blue from each other;

measuring color densities of the color patches produced on said calibration target;

producing error signals characteristic of differences between measured color densities and intended color densities; and

adjusting the converting process of said reproduction apparatus as a function of said error signals so as to provide output color densities closer to the intended color densities.

2. A method according to claim 1, wherein said adjusting step comprises the step of determining a relationship between said color patches by performing data interpolation from at least three of said patches, wherein said at least three patches represent a sampling of red, green, blue and black color codes.

3. A method according to claim 1, wherein said one subset of color patches is a set of neutral density patches.

4. A method according to claim 1, wherein said step of producing error signals comprises the step of determining target values of each of a red density, a green density, and a blue density as a function of a red drive code value, a green drive code value, and a blue drive code value.

5. A method according to claim 1, wherein said step of producing error signals comprises the step of determining target values of each of a red density, a green density and a blue density as a function of a red drive code value, a green drive code value, a blue drive code value and a black drive code value.

6. A method according to claim 1, wherein:

the patches of said one subset of color patches have neutral density code values; and

the patches of the another subset of color patches have red, green or blue density values which are deviated from the neutral density values.

7. A calibration target comprising media having at least one first patch with a neutral density code value, at least one second patch having a red code value which is deviated from its neutral value, at least one third patch having a green code value which is deviated from its neutral value, and at least one fourth patch having a blue code value which is deviated from its neutral value.

8. A calibration target as defined in Claim 7 wherein said at least one second, third, and fourth patch code values are selected by:

designating a set of neutral points along a neutral axis in a three-dimensional density space whose axes corresponding to red, green and blue densities; and

for each neutral point, selecting four non-neutral points such that the four non-neutral points sit on a common plane wherein (1) the neutral axis is normal to the common plane, (2) the common plane is further out on the neutral axis than the corresponding neutral point, (3) the four non-neutral points represent corners of a square in the common plane such that the square is centered on a point where the neutral axis intercepts the common plane, and (4) all four non-neutral points are roughly equidistant from each other.

9. A calibration target according to claim 7, comprising:

a plurality of said first patches such that said neutral density code values of each of said first patches is different from other first patches;

a plurality of said second patches such that said red input code values of each of said second patches is different from other second patches;

a plurality of said third patches such that said green input code values of each of said third patches is different from other third patches; and

a plurality of said fourth patches such that said blue input code values of each of said fourth patches is different from other fourth patches.

10. A calibration target according to claim 7, comprising:

a plurality of said first patches arranged in a first group, such that said neutral density code values of each of said first patches is different from other first patches;

a plurality of said second patches arranged in a second group, such that said red code values of each of said second patches is different from other second patches;

a plurality of said third patches arranged in a third group, such that said green code values of each of said third patches is different from other third patches; and

a plurality to said fourth patches arranged in a fourth group, such that said blue code values of each of said fourth patches is different from other fourth patches.

11. A calibration target according to claim 7, wherein the media comprises a single sheet upon which said least one first patch, said at least one second patch, said at least one third patch, and said at least one fourth patch are provided.

12. A calibration target according to claim 7, wherein the media comprises:

a first sheet upon which said at least one first patch is provided;

a second sheet upon which said at least one second patch is provided;

a third sheet upon which said at least one third patch is provided; and

a fourth sheet upon which said at least one fourth patch is provided.